What is claimed is:

Claims:

1. A method of making a multi-well test plate including a transparent panel and an upper frame portion with a plurality of walls defining wells arranged in a pattern, the method comprising:

dispensing a plurality of beads of an adhesive in a configuration corresponding to the pattern from an adhesive dispenser onto one of the upper frame portion and the transparent panel;

contacting the transparent panel with the upper frame portion such that the adhesive is disposed between the transparent panel and the upper frame portion; and

curing the adhesive to adhesively bond the upper frame portion and the transparent panel.

2. The method of claim 1 wherein at least two of the plurality of beads are dispensed simultaneously.

3. The method of claim 2 wherein dispensing the plurality of beads further comprises:

dispensing the at least two of the plurality of beads from corresponding number of pen transfer valves.

4. The method of claim 1 wherein dispensing the plurality of beads further comprises:

moving the adhesive dispenser in a pattern corresponding to the grid pattern while providing a flow of the adhesive to the one of the upper frame portion and the transparent panel.

5. The method of claim 1 wherein dispensing the plurality of beads is performed by robotic dispensing.

6. A method of making a multi-well test plate including a transparent panel and an upper frame portion with a plurality of walls defining wells arranged in a pattern, the method comprising:

transferring an adhesive arranged in a configuration corresponding to the pattern from a transfer member to the upper frame portion;

contacting the transparent panel with the upper frame portion such that the adhesive is disposed between the transparent panel and the upper frame portion; and

curing the adhesive to adhesively bond the upper frame portion and the transparent panel.

7. The method of claim 6 wherein the transfer member is a printing block, and transferring the adhesive further comprises:

applying an adhesive image having the configuration to the printing block;

positioning the printing block relative to the upper frame portion; and

contacting the printing block with the upper frame portion to affect adhesive transfer.

8. The method of claim 6 wherein the transfer member is a flexible transfer pad, and transferring the adhesive further comprises:

placing adhesive in grooves inscribed in the printing plate with the configuration;

contacting the printing plate with a flexible transfer pad to transfer the adhesive from the grooves to the transfer pad; and

contacting the flexible transfer pad with the upper frame portion to affect adhesive transfer.

9. The method of claim 6 wherein the transfer member is a resilient printing plate having raised lines arranged in the configuration, and transferring the adhesive further comprises:

rotating a cylindrical drum carrying the resilient printing plate on an exterior surface;

applying an adhesive to the raised lines of the resilient printing block; and

contacting the raised lines of the resilient printing block with the upper frame portion to affect adhesive transfer.

10. The method of claim 6 wherein transferring the adhesive is performed by at least one of transfer printing, flexographic printing, a silk screening process, and pad printing.

11. A method of making a multi-well test plate including a transparent panel and an upper frame portion with a plurality of walls defining wells arranged in a pattern, the method comprising:

transferring an adhesive arranged in a configuration corresponding to the pattern from a transfer member to the transparent panel by at least one of transfer printing, flexographic printing, and pad printing;

contacting the transparent panel with the upper frame portion such that the adhesive is disposed between the transparent panel and the upper frame portion; and

curing the adhesive to adhesively bond the upper frame portion and the transparent panel.

12. The method of claim 11 wherein the transfer member is a printing block, and transferring the adhesive further comprises:

applying an adhesive image having the configuration to the printing block;

positioning the printing block relative to the transparent panel; and

contacting the printing block with the transparent to affect adhesive transfer.

13. The method of claim 11 wherein the transfer member is a flexible transfer pad, and transferring the adhesive further comprises:

placing adhesive in grooves inscribed in the printing plate with the configuration;

contacting the printing plate with a flexible transfer pad to transfer the adhesive from the grooves to the transfer pad; and

contacting the flexible transfer pad with the upper frame portion to affect adhesive transfer.

14. The method of claim 11 wherein the transfer member is a resilient printing plate having raised lines arranged in the configuration, and transferring the adhesive further comprises:

rotating a cylindrical drum carrying the resilient printing plate on an exterior surface;

applying an adhesive to the raised lines of the resilient printing block; and

contacting the raised lines of the resilient printing block with the upper frame portion to affect adhesive transfer.

15. A method of making a multi-well test plate including a transparent panel and an upper frame portion with a plurality of walls defining adjacent wells and having upper and lower ends, the method comprising:

mounting the upper frame portion with the lower ends of the plurality of walls disposed adjacent a screen having apertures in a configuration corresponding to the lower ends of the plurality of walls;

urging portions of a layer of adhesive through a screen opposite to the lower ends of the plurality of walls through the apertures and onto the lower ends of the plurality of walls in the configuration;

contacting the transparent panel with the upper frame portion such that the adhesive is disposed between the transparent panel and the upper frame portion; and

curing the adhesive to adhesively bond the upper frame portion and the transparent panel.